

The opinion in support of the decision being entered today
is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte LUDWIG BUSAM, MICHAEL DIVO,
and ANDREAS FLOHR

Appeal 2007-1994
Application 09/674,052
Technology Center 3700

Decided: September 19, 2007

Before TONI R. SCHEINER, ERIC GRIMES, and RICHARD M.
LEBOVITZ, *Administrative Patent Judges*.

GRIMES, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 involving claims to a laminated web. The Examiner has rejected the claims as anticipated. We have jurisdiction under 35 U.S.C. § 6(b). We reverse.

BACKGROUND

The Specification describes “an apertured laminate web which may be used as a topsheet on a disposable absorbent article, such as a diaper. The laminate web comprises a liquid pervious first material and a liquid pervious

second material attached to the first material.” (Specification 4.) The first and second materials each have a plurality of apertures, the “apertures of the second material [being] aligned with the apertures of the first material. The second material preferably has a hydrophilicity which is greater than the hydrophilicity of the first material.” (*Id.*)

To form the apertures, the Specification describes feeding the first and second materials through an aperturing apparatus formed by rollers (*id.* at 15). The Specification states that, “[a]s the webs are apertured, the first and second materials are heated above the[ir] melting points such that at least a portion of the apertures[’] perimeter is fused” (*id.*).

DISCUSSION

1. CLAIMS

Claims 1, 3, 4, and 6-12 are pending and on appeal. We will focus on claim 1, the broadest claim on appeal, which reads as follows:

1. A laminate web comprising a liquid pervious first material and a liquid pervious second material attached to said first material, characterized by:

said first material having an effective open area of at least about 10 percent and a plurality of apertures with an effective size of at least 0.2 square millimeters, said second material having an effective open area of at least about 10 percent and a plurality of apertures with an effective size of at least 0.2 square millimeters, said apertures of said second material being aligned with said apertures of said first material,

wherein said second material has a hydrophilicity which is greater than the hydrophilicity of said first material,

wherein a plurality of fibers of said first material and a plurality of fibers of said second material are substantially fused together about the apertures,

wherein said first material has a first bonded area and said second material has a second bonded area, and wherein said second bonded area is greater than said first bonded area.

Thus, claim 1 is directed to a laminate web comprising first and second liquid pervious materials, each having a plurality of apertures. The apertures of the second material are aligned with the apertures of the first material and fibers of the first and second materials are substantially fused together about the apertures. The second material has a greater hydrophilicity than the first material.

Claim 1 also requires that the second material have a greater bonded area than the first material. The Specification refers to “bonded area” as “a factor in determining the softness and also the tensile strength of the web” (Specification 14). In particular, the Specification states:

As the bonded area of the web increases, the softness decreases and the tensile strength increases. In contrast, as the bonded area of the web decreases, the softness increases and the tensile strength decreases. In order to provide a laminate web which is both soft and strong, it is preferred that the first material ha[s] a relatively lower bonded area to provide softness and the second material ha[s] a relatively higher bonded area to provide strength. The first material preferably has a bonded area of from about 0% to about 25%, more preferably from about 5% to about 15%. The second material preferably has a bonded area of from about 0% to about 35%, more preferably from about 10% to about 20%.

(*Id.*)

Appellants argue that persons of skill in the art would understand that webs “are typically created by bonding the fibers which make[]up the web together. Fibers of a thermally bonded web can be bonded via heated calendar rolls. As the fibers pass through the heated calendar rolls, the fibers

can be melted in certain spots to form bonds between the fibers.” (Br. 8). Thus, Appellants argue, in view of its description in the Specification, the term “bonded area” would be understood to refer to “the percentage of fiber to fiber bonds in the . . . material” itself, and the “first [or second] bonded area” cannot be attributed solely to a portion of the first (or second) material (Br. 9).

Claim language must be interpreted according to how it would have been understood by those skilled in the art at the time the application was filed. *See Schering Corp. v. Amgen Inc.*, 222 F.3d 1347, 1353 (Fed. Cir. 2000). In addition, the Specification “is the single best guide to the meaning of a disputed term.” *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). We agree with Appellants that, based on the discussion in the Specification, persons of skill in the art would understand “bonded area” to refer to a property related to the percentage of fiber-to-fiber bonds in the first and second materials themselves. We interpret claim 1 to require that a greater percentage of the fibers in the second material are bonded to each other as compared to the fibers in the first material.

2. PRIOR ART

The Examiner relies on the following reference:

Gilman US 5,437,653 Aug. 1, 1995

3. ANTICIPATION

Claims 1, 3, 4, and 6-12 stand rejected under 35 U.S.C. § 102(b) as anticipated by Gilman. The Examiner finds that Gilman discloses all of the

limitations of claim 1 (Answer 3-4).¹ With regard to the bonded areas, the Examiner argues that

if the entire bonded area (the length of the article as set forth in col. 3, lines 55 - 56) of the second material (20) is compared to only the outermost portion (i.e., the area to the left of the article in figure 1 where reference character “18” is located) of the bonded area of the first material (12), the second material (20) has a bonded area greater than a bonded area of the first material.

(Answer 4.) The Examiner “contends that any bonded portion of the first material may be considered a first bonded area and any bonded portion of the second material may be considered a second bonded area” (*id.* at 7). The Examiner argues that, “if [she] considers a larger bonded portion of the second material as the second bonded area than that of the first material, then Gilman meets the claimed limitation” (*id.*).

Appellants argue that “Gilman does *not* teach ‘wherein said first material has a first bonded area and said second material has a second bonded area[,] and wherein the second bonded area is greater than said first bonded area’” (Br. 9). In particular, “Appellants assert that the Office has failed to give the term ‘bonded area’ its ordinary and customary meaning that one of ordinary skill in the art would ascribe to the term or its meaning based on the application” (Br. 7).

¹ The Examiner identifies Gilman layers 20, 22, and 24 as together forming the liquid pervious second material (Answer 3). Claim 1 recites that the second material has apertures. We agree with the Examiner that layer 20 has apertures (*id.* at 6). However, because Gilman does not disclose that the apertures in layer 20 extend through layers 22 and 24, we agree with Appellants that Gilman does not disclose that the multilayered structure formed from layers 20, 22, and 24 has apertures (Br. 5).

We agree. As discussed above, we interpret claim 1 to require that a greater percentage of the fibers in the second material are bonded to each other as compared to the fibers in the first material. The Examiner has not set forth a *prima facie* case that Gilman describes a second material having a greater percentage of bonding than the first material. We therefore reverse the rejection of claim 1 and of claims 3, 4, and 6-12, which depend from claim 1.

SUMMARY

The Examiner has not shown that the claims were anticipated by the applied reference. We therefore reverse the rejection of claims 1, 3, 4, and 6-12.

REVERSED

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